# District 08 Mobility Performance Report

2017 Fourth Quarter

DEPARTMENT OF TRANSPORTATION

January 12, 2017 D8 TMS SUPPORT

#### **District 08 Mobility Performance Report**

#### 2017 Fourth Quarter

#### **EXECUTIVE SUMMARY**

#### Overview

Caltrans District 8 contains two counties located in Southern California: the San Bernardino and Riverside counties. Both are part of the Inland Empire, with Riverside County having a population of almost 2.3 million residents and San Bernardino County with 2.1 million residents. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area land.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT)
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty—four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion, while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

#### **FINDINGS**

In the fourth quarter of 2017, total delay equaled 2.8 million Vehicle Hours of Delay (VHD) at the 35 mph speed threshold, and 7.8 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 39 thousand VHD at 35 mph, and 106 thousand VHD at 60 mph. The Vehicle Miles of Travel (VMT) equaled 7.5 billion miles for this quarter. The total delay at 35 mph is 1,522,050 for Riverside County and 1,306,648 for San Bernardino County. The total delay at 60 mph is 3,885,196 for Riverside County and 3,914,473 for San Bernardino County.

#### PROJECT STATUS

The Following District 8 projects are currently being constructed or are scheduled for construction for 2017. These current and future (planned) projects will relieve congestion in District 8:

#### **RIVERSIDE COUNTY**

#### RIV 15; INSTALL AND UPGRADE TMS ELEMENTS; EA 0G770

Install new Fiber Optic infrastructure on Rte 15 from PM 0.00/41.80 and upgrade newly installed wireless vehicle detection stations. Connect all the existing TMS elements to the newly installed Fiber Optic infrastructure.

Approve Construction Contract Date- 8/15/2017

#### RIV 215; INSTALL AND UPGRADE TMS ELEMENTS; EA 0G780

Install new Fiber Optic infrastructure on Rte 215 from PM 8.40/38.80 and upgrade newly installed wireless vehicle detection stations. Connect all the existing TMS elements to the newly installed Fiber Optic infrastructure.

Approve Construction Contract Date- 3/30/2016

#### **RIV 91; CIP; EA 0F540**

Construct 1 MF lane & 2 Toll Express lane each direction on RTE 91 from PM 0.00/11.55. Approve Construction Contract Date- 5/09/2013

#### **RIV 15; EA 1E300**

Install Ramp Metering System at both NB & SB Entrance Ramps at Temescal Canyon RD to Weirick RD on RTE 15 from PM 33.10/35.80.

Approve Construction Contract Date- 6/15/2016

#### **RIV 60; EA 1C640**

Replace Wireless Communication System with Fiber Optic Infrastructure & connect it to the existing components on Rte 60 from PM 0.00/12.20.

Approve Construction Contract Date- 5/22/2017

#### SAN BERNARDINO COUNTY

#### **SBD 10**

#### SBD 10; REPLACE RANDOM SLABS ON MAINLINE & CONNECTORS; EA 0Q760

Replace random slabs on Mainline & Connectors. Also upgrade all the detection TMS elements on Rte 10 from PM 0.00/30.90

Approve Construction Contract Date- 01/15/15

### SBD 15; RECONSTRUCT EXISTING "D" STREET & STODDARD WELLS RD IC ; EA 3555V

Reconstruct existing "D", "E" ST, & Stoddard Wells RD IC, Widen Victorville separation overhead. PM 42.50/46.00

Approve Construction Contract Date- 11/05/15

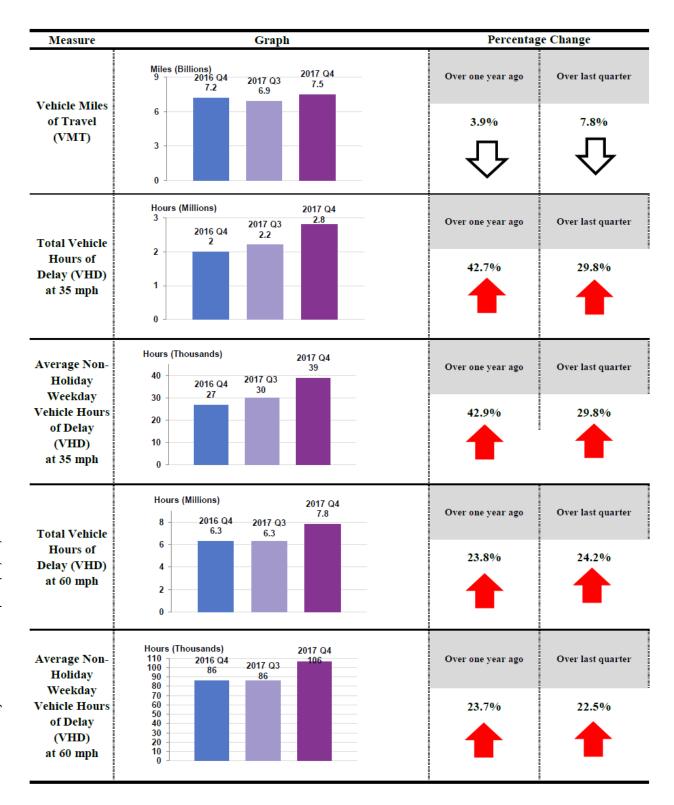
## SBD 210; INSTALL FIBER OPTIC COMMUNICATION (FOC), CLOSED CIRCUIT TELEVISION CAMERAS (CCTV) AND CHANGEABLE MESSAGE SIGN (CMS); EA 0E551

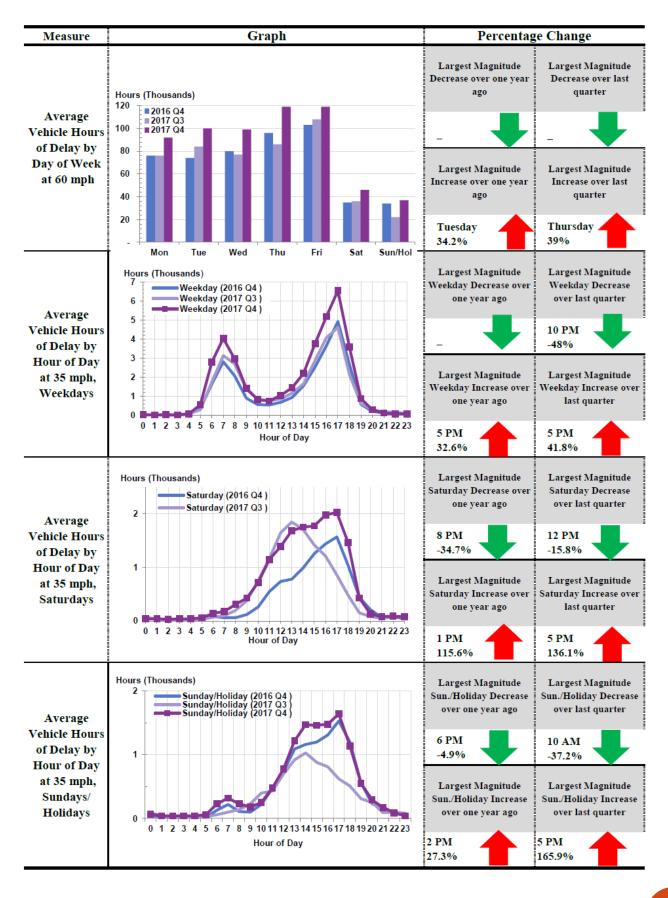
Install Fiber Optic Communication (FOC), Closed Circuit Television (CCTV) and Changeable Message Sign (CMS) PM 21.80/27.30

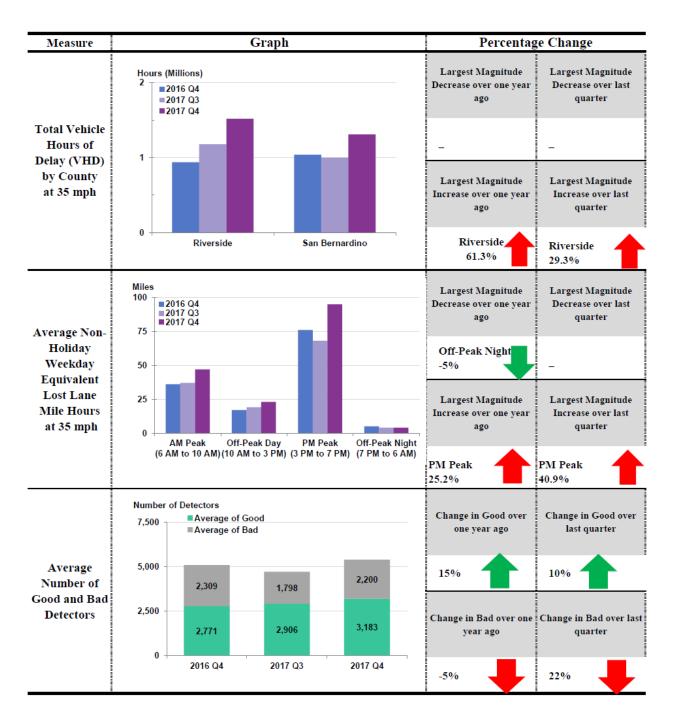
Approve Construction Contract Date- 01/11/17

Bottleneck 2017 Q4 AM								
					Average	Total	Total	
			CA		Extent	Delay	Duration	
Rank	County	Freeway	Postmile	Approximate Location	(miles)	(hours)	(hours)	Period
1	Riverside	SR91-W	R.995	GREEN RIVER 1.50		61838	212	AM
2	Riverside	SR71-S	2.5	S-O PRADO DAM RD 3.18 3		37730	159	AM
3	Riverside	I215-N	40.929	MARTIN LUTHER KING	1.72	32631	206	AM
4	Riverside	1215-S	44.908	Center St	3.51	30400	109	AM
5	Riverside	I15-N	45.93	.25 N-O 6th ST.	2.11	21770	96	AM
6	Riverside	SR91-W	R3.054	SERFAS CLUB RD	2.25	19026	35	AM
7	San Bernardino	115-S	.969	JURUPA	1.57	17587	95	AM
8	Riverside	I15-N	52.27	PHILADELPHIA UC	0.85	17071	149	AM
9	Riverside	SR91-W	10.724	PIERCE	1.27	10410	91	AM
Bottle	Bottleneck 2017 Q4 PM							
					Average	Total	Total	
			CA		Extent	Delay	Duration	
Rank	County	Freeway	Postmile	Approximate Location	(miles)	(hours)	(hours)	Period
1	San Bernardino	I15-N	3.2	4TH ST NB ONR	2.63	94622	246	PM
2	San Bernardino	I15-S	.969	JURUPA	2.14	55490	178	PM
3	Riverside	I15-N	45.93	.25 N-O 6th ST.	2.35	42584	162	PM
4	San Bernardino	I10-E	30.7	ORANGE ST	2.31	40131	122	PM
5	Riverside	1215-S	40.76	MLK SB ON	2.37	39604	184	PM
6	San Bernardino	I10-E	13.041	Cherry Ave(T)	2.85	38151	123	PM
7	Riverside	SR91-W	10.724	PIERCE	1.76	36911	215	PM
8	Riverside	1215-S	R32.5	OLEANDER AVE	3.80	33281	147	PM
9	San Bernardino	I10-E	13.8	FONTANA REST	0.74	26194	215	PM
10	San Bernardino	I210-E	8.7	.75 E-O MILLIKEN	3.42	24698	72	PM

#### **Quarterly Mobility Statistics**







Congestion by Route												
		Vehicle Hours of Delay at 35 mph			Difference 2017 Q4-2016 Q4		Difference 2017 Q4-2017 Q3		Rank			
Route	County	2016 Q4	2017 Q3	2017 Q4	Absolute	Percentage	Absolute	Percentage	2016 Q4	2017 Q3	2017 Q4	
SR91	Riverside	294210.7	444018.5	549386.6	255175.9	87%	105,368	24%	2	1	1	
l15	Riverside	213823.8	276040.8	462625.6	248801.8	116%	186,585	68%	5	4	2	
l10	San Bernardino	291819.5	216865.8	396181.8	104362.3	36%	179,316	83%	3	5	3	
l15	San Bernardino	326717	391579.9	381892.2	55175.2	17%	(9,688)	-2%	1	2	4	
I215	Riverside	272371.6	312981.6	339758.9	67387.3	25%	26,777	9%	4	3	5	
I210	San Bernardino	174932.4	158556.4	235178.4	60246	34%	76,622	48%	6	6	6	
SR60	San Bernardino	133065.1	117265.6	147314.2	14249.1	11%	30,049	26%	7	7	7	
SR60	Riverside	104978.9	100767	96890.3	-8088.6	-8%	(3,877)	-4%	8	8	8	
I215	San Bernardino	73762.4	49212.3	94447.7	20685.3	28%	45,235	92%	9	10	9	
SR71	San Bernardino	38026	68621.7	51574.1	13548.1	36%	(17,048)	-25%	10	9	10	
l10	Riverside	25937.2	14084.4	39598.8	13661.6	53%	25,514	181%	12	12	11	
SR71	Riverside	32375.8	29478.2	33789.7	1413.9	4%	4,312	15%	11	11	12	
SR259	San Bernardino	13.5	0	59.3	45.8	339%	59		13		13	
TOTALS		1 982 034	2 179 472	2 828 698	846 664	42.7%	649 225	29.8%		-		